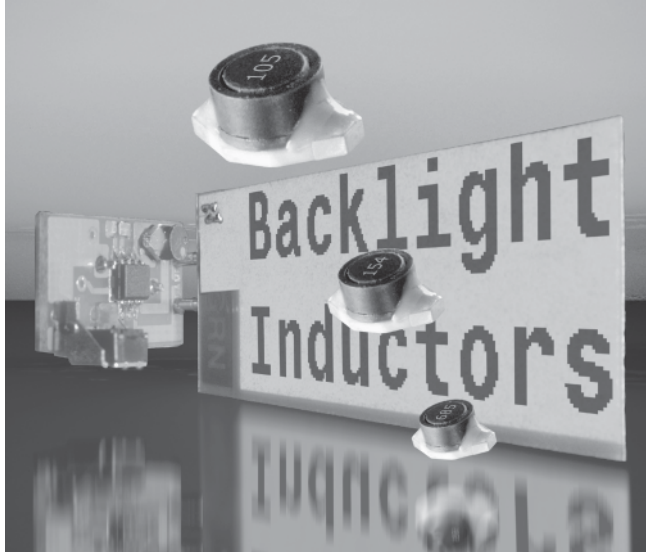




# Backlight Inductors - DS1608B Series



- Specially designed for demanding backlighting applications
- High breakdown voltage and very low DCR

**Designer's Kit C334** contains 3 of each value

**Core material** Ferrite

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Terminations** RoHS compliant gold over nickel over moly-manganese. Other terminations available at additional cost.

**Weight** 0.14 – 0.16 g

**Ambient temperature** –40°C to +85°C with  $I_{rms}$  current, +85°C to +115°C with derated current

**Storage temperature** Component: –40°C to +115°C.  
Packaging: –55°C to +80°C

**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Mean Time Between Failures (MTBF)** 26,315,789 hours

**Packaging** 750/7" reel; 2500/3" reel Plastic tape: 12 mm wide, 0.28 mm thick, 4 mm pocket spacing, 3 mm pocket depth

**PCB washing** Only pure water or alcohol recommended

| Part number <sup>1</sup> | L<br>±20% <sup>2</sup><br>(mH) | DCR<br>max<br>(Ohms) | Insulation<br>core-winding<br>(MOhms) | SRF<br>typ<br>(MHz) | $I_{rms}$ <sup>3</sup><br>(mA) |
|--------------------------|--------------------------------|----------------------|---------------------------------------|---------------------|--------------------------------|
| DS1608B-104ML_           | 0.10                           | 0.95                 | >10                                   | 12                  | 220                            |
| DS1608B-154ML_           | 0.15                           | 1.4                  | >10                                   | 10                  | 200                            |
| DS1608B-224ML_           | 0.22                           | 1.7                  | >10                                   | 8                   | 180                            |
| DS1608B-334ML_           | 0.33                           | 2.2                  | >10                                   | 6                   | 160                            |
| DS1608B-474ML_           | 0.47                           | 3.8                  | >10                                   | 5                   | 140                            |
| DS1608B-684ML_           | 0.68                           | 4.9                  | >10                                   | 4                   | 120                            |
| DS1608B-105ML_           | 1.0                            | 9                    | >10                                   | 2                   | 100                            |
| DS1608B-155ML_           | 1.5                            | 11                   | >10                                   | 1                   | 80                             |
| DS1608B-225ML_           | 2.2                            | 19                   | >10                                   | 1                   | 50                             |
| DS1608B-335ML_           | 3.3                            | 24                   | >10                                   | 1                   | 40                             |
| DS1608B-475ML_           | 4.7                            | 30                   | >10                                   | 1                   | 30                             |
| DS1608B-685ML_           | 6.8                            | 56                   | >10                                   | 0.9                 | 20                             |
| DS1608B-106ML_           | 10.0                           | 74                   | >10                                   | 0.8                 | 10                             |

- When ordering, please specify **termination** and **packaging** codes:

**DS1608B-106MLC**

**Termination:** L = RoHS compliant gold over nickel over moly-manganese

**Special order:** T = RoHS tin-silver-copper (95.5/4/0.5)  
or S = non-RoHS tin-lead (63/37).

**Packaging:** C = 7" machine-ready reel. EIA-481 embossed plastic tape (750 parts per full reel).

B = Less than full reel. In tape, but not machine ready.  
To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape (2500 parts per full reel).

- Inductance tested at 0.1 Vrms, 100 kHz, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.

- Current that causes a 30°C temperature rise from 25°C ambient.

- Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**Coilcraft**<sup>®</sup>

Specifications subject to change without notice.  
Please check our website for latest information.

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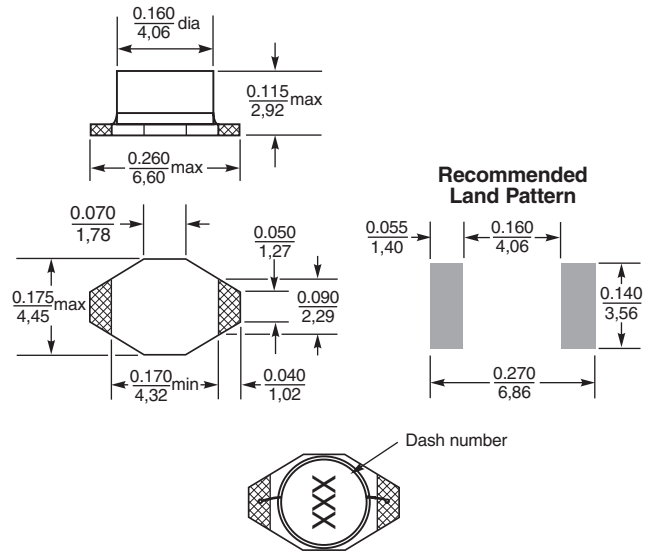
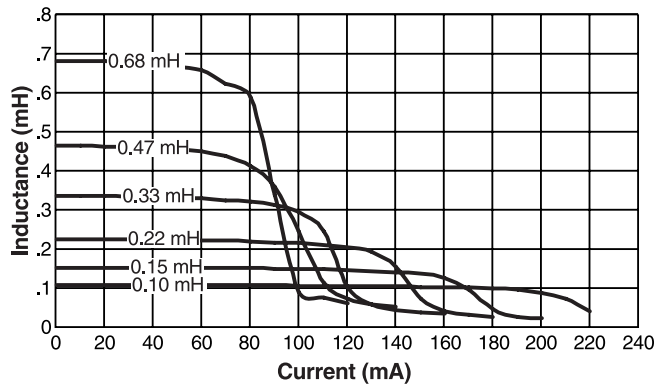
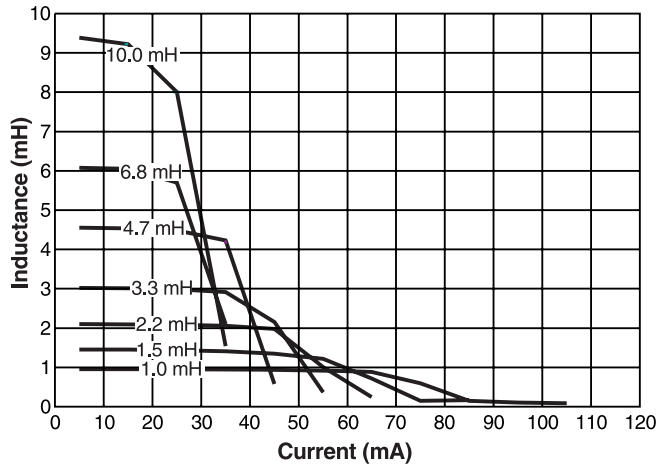
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>



# Backlight Inductors - DS1608B Series

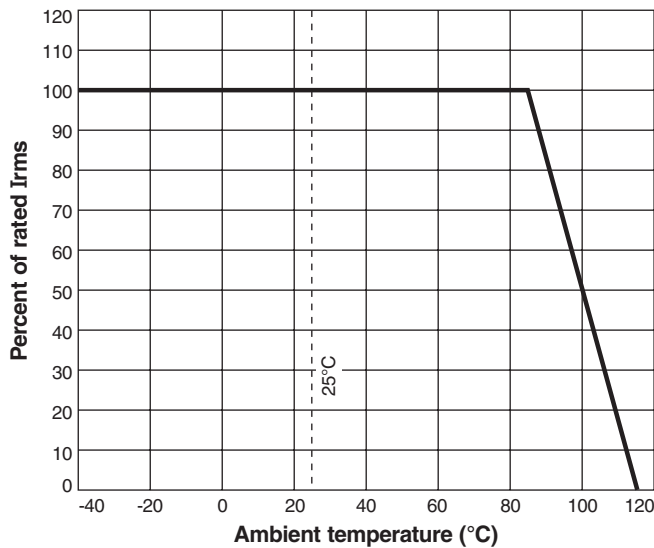
## Typical Inductance vs. Current



Part marking since Feb. 2005. Parts manufactured prior to that date may have color dots. Visit [www.coilcraft.com/colrpowr.cfm](http://www.coilcraft.com/colrpowr.cfm) for details.

Dimensions are in  $\frac{\text{inches}}{\text{mm}}$

## Irms Derating



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1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>